

Amendment to the Specification

Please replace paragraph [0106] with the following amended paragraph:

[0106] The methods, compositions and kits of the invention are suitable for isolation of protein and peptide molecules from any cellular source, including a variety of cells, tissues, organs or organisms, which may be natural or which may be obtained through any number of commercial sources (including American Type Culture Collection (ATCC), [Rockville, Md] Manassas, Virginia.; Jackson Laboratories, Bar Harbor, Me.; Cell Systems, Inc., Kirkland, Wash.; Advanced Tissue Sciences, La Jolla, Calif.). Cells that may be used as cellular protein and peptide sources may be prokaryotic (bacterial, including members of the genera *Escherichia* particularly *E. coli*), *Serratia*, *Salmonella*, *Staphylococcus*, *Streptococcus*, *Clostridium*, *Chlamydia*, *Neisseria*, *Treponema*, *Mycoplasma*, *Borrelia*, *Bordetella*, *Legionella*, *Pseudomonas*, *Mycobacterium*, *Helicobacter*, *Agrobacterium*, *Collectotrichum*, *Rhizobium*, and *Streptomyces*) or eukaryotic (including fungi or yeasts, plants, protozoans and other parasites, and animals including humans and other mammals). Also suitable for use as sources of protein and peptide molecules are mammalian tissues or cells such as those derived from brain, kidney, liver, pancreas, blood, bone marrow, muscle, nervous, skin, genitourinary, circulatory, lymphoid, gastrointestinal and connective tissue sources (e.g. of endodermal or ectodermal origin), as well as those derived from a mammalian (including human) embryo or fetus. Appropriate sources of protein and peptide may also be any of the above cells harboring plasmids, phagemids, cosmids, viruses, phages, or other DNA molecules capable of expressing the desired proteins and peptides. These cells, tissues and organs may be normal, primary, transformed, or established cell lines, or they may be pathological such as those involved in infectious diseases (caused by bacteria, fungi or yeast, viruses including AIDS) or parasites, in genetic or biochemical pathologies (e.g., cystic fibrosis, hemophilia, Alzheimer's disease, schizophrenia, muscular dystrophy or multiple sclerosis), or in cancers and cancerous processes. The methods, compositions and kits of the invention are well-suited for isolation of small soluble proteins and peptides, e.g. those of 1000 kD or less, preferably, about 1-100 kD, most preferably, about 1-50 kD. For larger molecular weight proteins, e.g, those greater than 1000 kD, lysozyme may be used as an adjunct to assist in

the release of these proteins. The methods of the invention are particularly well suited for isolation of protein or peptide molecules expressed in a biological host, which form an inclusion body. To release protein or peptide molecules from inclusion bodies, reagents such as urea or guanidine-HCl may be used as an adjuvant to assist in the release of proteins and peptide molecules associated with the inclusion bodies.

Please replace paragraph [0111] with the following amended paragraph:

[0111] The surfactant is present in the cell lysis composition in an amount ranging from about 0.001 to about 10% (w/v) of the composition, preferably ranging from about 0.01 to about 10%(w/v), and most preferably about 1 to about 10% (w/w). When a 10.times. concentrate form of the cell lysis reagent is added to cell media in certain applications described herein, the preferred final concentration of the surfactant ranges from about 0.1 to about 1%(w/v). The surfactant may be selected from the group consisting of non-ionic surfactants, cationic surfactants, and mixtures thereof having a hydrophobic-lipophilic balance value ranging from about 11 to about 16. Commercial sources of such surfactants can be found in McCutcheon's EMULSIFIERS AND DETERGENTS, North American Edition, 2002, McCutcheon Division, MC Publishing Company, also incorporated herein by reference. Suitable, but non-limiting, examples of non-ionic surfactants include alkyl alcohol ethoxylates, alkyl ester ethoxylates, polypropylene oxide, sorbitol alkyl esters, glycerol alkyl esters, ethylene oxide/propylene oxide block co-polymers; poly(oxyethylene) alkyl ethers such as those sold under the tradename [Brij] BRIJ available from ICI Americas (Wilmington, Del.), poly(oxyethylene) sorbitan esters sold under the tradename [Tween] TWEEN (ICI Americas, Wilmington, Del.). The preferred non-ionic surfactants include ethoxylated alkylphenols such as ethoxylated nonylphenols sold under the tradename [Tergitol] TERGITOL [®] NP (Union Carbide, Danbury, Conn. or octylphenoxypolyethoxyethanol sold under the tradename [Triton] TRITON X (Rohm & Haas, Philadelphia, Pa.).

Please replace paragraph [0112] with the following amended paragraph:

[0112] Suitable, but non-limiting, examples of cationic surfactants comprise ethylene oxide condensates of aliphatic amines or ethoxylated tallow amines. The preferred cationic surfactants include the ethoxylated amines sold under the tradename [Trymeen] TRYMEEN from Henkel Corp. (Cincinnati, Ohio), and the [Tomah] TOMAH E series available from Tomah Products, Inc. (Milton, Wis.).

Please replace paragraph [0113] with the following amended paragraph:

[0113] Some surfactants suitable, but non-limiting, for use in our present invention, are characterized as having both non-ionic and cationic properties such as ethoxylated fatty amines sold under the tradename [Rhodameen] RHODAMEEN VP, available from Rhodia (Cranberry, N.J.)